

WHAT IS CLAIMED IS:

1. A karaoke compact disc (CD) which is formatted into video sectors and audio sectors, said audio sectors being divided into a first area for recording accompaniment sound and playing sound at the same time, and a second area for recording accompaniment sound only, and said audio sectors being provided to record coding information for distinguishing between audio data recorded in said first area and audio data recorded in said second area.

2. A device for processing audio signals stored on a compact disk (CD) having a karaoke CD format, comprising:

demodulation means for demodulating a signal recorded on said CD which distinguishes between a first area of said CD in accordance with said karaoke CD format for recording accompaniment sound and playing sound at the same time, and a second area of said CD in accordance with said karaoke CD format for recording accompaniment sound only, and for outputting a demodulated signal;

audio signal processing means for processing audio signals recorded on said CD in accordance with said demodulated signal and for outputting a first data signal corresponding to said accompaniment sound and said playing sound, and a second data signal corresponding to said playing sound only;

switching means for selecting one of said first and second data signals output by said audio signal processing means and outputting a selected data signal;

Digital-to-Analog (D/A) converting means for converting said selected data signal to an analog data signal and outputting said analog data signal to a speaker; and

control means for controlling said demodulation means, said audio signal processing means, said switching means, and said D/A converting means.

3. The device as claimed in claim 2, wherein said demodulation means includes:

a first demodulator for carrying out Eight-to-Fourteen (EFM) demodulation in accordance with said karaoke CD format to distinguish between a first area of said CD in accordance with said karaoke CD format for recording accompaniment sound and playing sound at the same time, and a second area of said CD in accordance with said karaoke CD format and for outputting a first demodulated signal; and

a second demodulator for demodulating signals recorded in interleaved sectors of said CD in accordance with said first demodulated signal to produce demodulated sector interface signals and applying said demodulated sector interleave signals to said audio processing means.

4. The device as claimed in claim 3, wherein said first demodulator operates in accordance with EFM/CIRC (Cross Interleave Read Solomon Code).

5. The device as claimed in claim 3, wherein said second demodulator further comprises a CD-ROM decoder.

6. The device as claimed in claim 2,

wherein said audio signal processing means includes:

a CPU for separating audio data and time data contained in said demodulated signal received from said demodulation means under the control of said control means,

a System Time Clock (STC) for generating a synchronizing signal using said time data received from said CPU,

a memory for receiving and storing said audio data from said CPU,

a MPEG audio decoder for decoding said audio data stored in said memory,

a demultiplexer for recording and separating data from said MPEG audio decoder into first data corresponding to accompaniment sound and playing sound and second data corresponding to accompaniment sound, and outputting said first and second data under the control of said CPU,

first audio presentation means for comparing a Presentation Time Stamp (PTS) of said second data received from said demultiplexer to said synchronizing signal received from said STC to control presentation time of said second data, and

second audio presentation means for comparing a PTS of said first data corresponding to accompaniment sound and playing sound received from said demultiplexer to said synchronizing signal received from said STC to control presentation time of said first data.

add A2

add B1

add C1  
add D4

add E